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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: STRAUVEN, Yvan

Serial No. 09/936,531

Group:1746

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Examiner: Crepeau, Jonathan

For: Centrifugally atomized zinc alloy.....

Commissioner for Patents
P.O.Box 1450
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DECLARATION UNDER 37 C.F.R. 1.132

I, Yvan Strauven, declare as follows.

1. I am an inventor of the subject matter of the above-identified patent application.
2. A study was conducted under my direction and guidance to compare volume expansion property of alloy powders made exclusively by centrifugal atomization but with different oxygen content in protective atmosphere exactly as described in the specification of the instant patent application under "Experiment 2" at page 6 keeping all other process parameters and test procedures identical to "Experiment 1" at page 4 thereof. The results are presented below in Table 2 (which corresponds to Table 2 of the specification).
3. The data clearly show that when the oxygen content in the protective atmosphere of the centrifugally atomizing chamber is outside the limits of this invention, then the volume expansion measured for the alloy powders becomes unacceptable, as the comparative examples:
 - (25) versus (27) illustrates the effect of low oxygen for composition (3);
 - (26) versus (28) for composition (2),
 - (29) versus (30) for composition (1),
 - (31) versus (32) for composition (4),
 - (33) versus (34) for composition (5),
 - and (35) versus (36) illustrates for composition (8).



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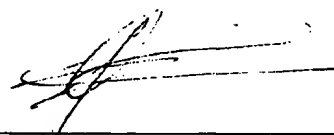
Table 2: Volume expansion of different centrifugally atomised powders

Ex. No.	Alloy powder additives (ppm)					O ₂ % by Volume	Volume expansion (%)
	In	Bi	Ca	Al	Pb		
(25)	200	100	-	100	54	2.5	3.0
(26)	150	150	-	-	40	2.0	5.6
(27)	200	100	-	100	54	5	12.3
(28)	150	150	-	-	40	air	23.6
(29)	200	-	-	70	-	1	4.1
(30)	200	-	-	70	-	6.25	35.3
(31)	250	250	150	-	-	0.4	3.1
(32)	250	250	150	-	-	6.25	25.6
(33)	200	100	180	70	-	3	1.5
(34)	200	100	180	70	-	5.5	13.9
(35)	-	200	-	70	-	0.8	2.1
(36)	-	200	-	70	-	5.5	32.6

4. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application and any patent issuing thereon.

June 18th, 2004

Date



Yvan Strauven.